COMPONENTS:

- (1) 3-Methylbicyclo[4.4.0]decane (2-methyldecalin); $C_{11}^{H}_{20}$; [2958-76-1]
- (2) Water; H₂O; [7732-18-5]

ORIGINAL MEASUREMENTS:

Baker, E.G.

Am. Chem. Soc., Div. Petrol.
Chem., Preprints 1958, 3, N°4,
C61-8.

VARIABLES:

One temperature: 25°C

PREPARED BY:

M.C. Haulait-Pirson

EXPERIMENTAL VALUES:

The solubility of 2-methyl- C^{14} decalin in water at 25°C was reported to be 40.6 x 10^{-9} g(1)/g(2).

The corresponding mass percentage and mole fraction, x_1 , calculated by the compiler are 4.06×10^{-6} g(1)/100 g sln and 4.82×10^{-9} .

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

Carbon-14 labeled (1) was used as tracer. The technique of preparing a saturated aqueous solution of (1) by ultrafiltration of a (1)-(2) dispersion has been described in ref 1. A Packard Tri-Carb Liquid Scintillation Spectrometer was used to detect the radioactive (1) dissolved in (2).

SOURCE AND PURITY OF MATERIALS:

- (1) Nuclear Instrument and Chemical Corporation; used as received.
- (2) distilled.

ESTIMATED ERROR:

REFERENCES:

1. Baker, E.G. Am. Chem. Soc., Div. Petrol. Chem., Preprints-Symposia 1956, 1, N°2, 5.